What is claimed is:

1. A magnetic thin film head comprising:

a write head element; and

a read head element;

wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein Ni in composition of a formed layer is 80.8wt% to 82.0wt%.

2. A magnetic thin film head according to claim 1, in which said Ni is composed of an initially formed layer having a thickness of 1.0 μ m is 80.8 to 82.0 wt%, and of an upper layer on said initially formed layer 1.0 μ m thick is 81.0 to 81.2 wt%.

3 A magnetic thin film head comprising:

a write head element; and

a read head element;

wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein a magnetostriction constant λ

representing a magnetic characteristic of said ferromagnetic film is -2.0 to -7.0×10^{-7} in an initially formed layer having a thickness of 1.0 μ m, and

wherein said magnetostriction constant λ is -3.0 to -4.0×10^{-7} in an upper layer on said initially formed layer 1.0 μ m thick.

4 A magnetic thin film head comprising:

a write head element; and

a read head element;

wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein a film thickness exceeding 1.0 μ m in said ferromagnetic film formed of NiFe permalloy material has an Ni content accuracy of $\pm$0.1 wt%, and

wherein a film thickness of 1.0 μ m or less in said ferromagnetic film formed of NiFe permalloy material has an Ni content accuracy of $\pm$0.3 wt%.

5. A method of fabricating a magnetic thin film comprising the step of:

(a) forming a write head element;

(b) forming a read head element;

wherein a ferromagnetic film having a soft

magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein Ni in composition of an initially formed layer having a thickness of 1.0 μ m is 80.8 to 82.0 wt%, and

wherein Ni in composition of an upper layer on said initially formed layer 1.0 μ m thick is 81.0 to 81.2 wt%,

(c) timewise regulating a current density of permalloy electroplating under control of a personal computer;

wherein a plurality of time periods and a plurality of current values are preset for film formation.

6. A method of fabricating a magnetic thin film comprising the step of:

(a) forming a write head element; and

(b) forming a read head element;

wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein a magnetostriction constant λ representing a magnetic characteristic of said

ferromagnetic film is -2.0 to -7.0 x 10^{-7} in an initially formed layer having a thickness of 1.0 μ m, and

wherein said magnetostriction constant λ is -3.0 to -4.0 x 10^{-7} in an upper layer on said initially formed layer 1.0 μ m thick,

(c) timewise regulating a current density of permalloy electroplating under control of a personal computer;

wherein a plurality of time periods and a plurality of current values are preset for film formation.

7. A method of fabricating a magnetic thin film comprising the step of:

(a) forming a write head element; and

(b) forming a read head element;

wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein a film thickness exceeding 1.0 μ m in said ferromagnetic film formed of NiFe permalloy material has an Ni content accuracy of $\pm$0.1 wt%, and

wherein a film thickness of 1.0 μ m or less in said ferromagnetic film formed of NiFe permalloy material has an Ni content accuracy of $\pm$0.3 wt%,

(c) timewise regulating a current density of permalloy electroplating under control of a personal computer;

wherein a plurality of time periods and a plurality of current values are preset for film formation.

8 A magnetic disk apparatus having a magnetic thin film head comprising:

a write head element; and

a read head element;

wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein Ni in composition of an initially formed layer having a thickness of 1.0 μ m is 80.8 to 82.0 wt%, and

wherein Ni in composition of an upper layer on said initially formed layer 1.0 μ m thick is 81.0 to 81.2 wt%.

9 A magnetic disk apparatus having a magnetic thin film head comprising:

a write head element; and

a read head element;

wherein a ferromagnetic film having a soft

magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein a magnetostriction constant λ representing a magnetic characteristic of said ferromagnetic film is -2.0 to -7.0×10^{-7} in an initially formed layer having a thickness of 1.0 μ m, and

wherein said magnetostriction constant λ is -3.0 to -4.0×10^{-7} in an upper layer on said initially formed layer 1.0 μ m thick.

10 A magnetic disk apparatus having a magnetic thin film head comprising:

A magnetic thin film head comprising:

a write head element; and

a read head element;

wherein a ferromagnetic film having a soft magnetic characteristic and a magnetic shield function is formed of NiFe permalloy material by electroplating in the vicinity of a sensor film arranged as said read head element,

wherein a film thickness exceeding 1.0 μ m in said ferromagnetic film formed of NiFe permalloy material has an Ni content accuracy of ± 0.1 wt%, and

wherein a film thickness of 1.0 μ m or less in said ferromagnetic film formed of NiFe permalloy

material has an Ni content accuracy of ±0.3 wt%.